

SiO ₂
B_2Q_3
Al_2Q_3
MgÒ
CaO \
SrO \
BaO \
with SrQ + BaO
ZnO \

- 3. (Amended) An aluminoborosilicate glass according to Claim 1, containing at most 5% by weight MgO based on oxide.
- 4. (Amended) An aluminoborosilicate glass according to Claim 1, containing at least 60% by weight SiO₂ based on oxide.
- 5. (Amended) An aluminoborosilicate glass according to Claim 1, containing more than 11% by weight MgO, CaO, SrO and BaO together based on oxide.
- 6. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

SiO ₂	\
B_2O_3	\
Al_2O_3	- /
MgO	1
CaO	\
SrO	/
BaO	\
with SrO + BaO	,
ZnO	
ZrO_2	
TiO ₂	
With $ZrO_2 + TiO_2$	
As_2O_3	
Sb_2O_3	
SnO_2	
CeO ₂	

> 58 - 65,
> 6 - 11.5
> 14 - 20,
> 3 - 6,
>4.5-10
0 - 1.5,
> 1.5 - 6,
> 3,
0 - < 2,
0 - 2,
0 - 2,
0 - 2,
0 - 1.5,
0 - 1.5,
0 - 1.5,
0 - 1.5,



Cont

Cl⁻
$$0 - 1.5$$
,
F⁻ $0 - 1.5$,
 SO_4^{2-} $0 - 1.5$, and
Wherein $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^-$
 $+ F^- + SO_4^{2-}$ $0 - 1.5$,

and essentially no alkali bxides.

- 10. (Amended) An aluminoborosilicate glass according to claim 1, containing at least 5% by weight CaO based on oxide.
- 11. (Amended) An aluminoborosilicate glass according to claim 1, containing > 7 to ≤11% by weight B₂O₃ based on oxide.
- 12. (Amended) An aluminoborosilicate glass according to claim 1, containing > 2.5% to ≤5% by weight BaO based on oxide.
- 13. (Amended) An aluminoborosilicate glass according to claim 1, containing more than 3% by weight SrO and BaO together based on oxide.
- 14. (Amended) An aluminoborosilicate glass according to claim 1, containing up to 0.5% by weight ZnO based on oxide.
- 15. (Amended) An aluminoborosilicate glass according to claim 1, containing up to 1.5% by weight ZnO based on oxide.
- 16. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

$$\begin{array}{c} \text{SiO}_2 \\ \text{B}_2\text{O}_3 \\ \text{Al}_2\text{O}_3 \\ \text{MgO} \\ \text{CaO} \\ \text{SrO} \\ \text{BaO} \\ \text{with SrO} + \text{BaO} \\ \end{array} \begin{array}{c} > 58 - 65, \\ > 6 - 11.5, \\ > 14 - 20, \\ > 3 - 6, \\ > 4.5 - 10, \\ 0 - 1.5, \\ > 1.5 - 6, \\ > 3, \end{array}$$

SGW-115

ZnO ZrO ₂ TiO ₂	0 - < 2,
ZrO ₂	≤0.5, and
TiO ₂	≤ 0.5,

17. (Amended) An aluminoborosilicate glass according to Claim 2, containing at most 5% by weight MgO based on oxide.

- 18. (Amended) An aluminoborosilicate glass according to Claim 2, containing at least 60% by weight SiO₂ based on oxide.
- 19. (Amended) An aluminoborosilicate glass according to Claim 2, containing more than 11% by weight based on oxide MgO, CaO, SrO and BaO is greater together.
- 20. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

1		
SiO ₂		> 58 - 65,
B_2O_3		> 6 - 11.5,
Al_2O_3		> 14 - 20,
MgO		> 3 - 6,
CaO		> 4.5 - 10,
SrO		0 - < 4,
BaO		> 2.5 - 6,
with S	rO + BaO	> 3,
ZnO		0 - 0.5,
ZrO ₂		0-2,
TiO ₂		0-2,
with Z	$O_2 + TiO_2$	0-2,
As_2O_3		0 - 1.5,
Sb_2O_3		0 - 1.5,
SnO_2		0 - 1.5,
CeO_2		0 - 1.5,
Cl		0 - 1.5,
F-		0 - 1.5,
SO_4^{2-}		0 - 1.5, and

Wherein
$$As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^2 + F^2 + SO_4^{2^2}$$

0 - 1.5,

- 24. (Amended) An aluminoborosilicate glass according to claim 2, containing at least 5% by weight CaO based on oxide.
- 25. (Amended) An aluminoborosilicate glass according to claim 2, containing > 7 to $\leq 11\%$ by weight B₂O₃ based on oxide.
- 26. (Amended) An aluminoborosilicate glass according to claim 2, containing > 2.5% to ≤5% by weight BaO based on oxide.
- 27. (Amended) An aluminoborosilicate glass according to claim 2, containing more than 3% by weight SrO and BaQ together based on oxide.
- 28. (Amended) An aluminoborosilicate glass according to claim 2, containing up to 0.5% by weight ZnO based on oxide.
- 29. (Amended) An aluminoborosilicate glass according to claim 2, containing up to 1.5% by weight ZnO based on oxide.
- 30. (Amended) An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

	1
SiO_2	> 58 – 65,
B_2O_3	> 6 – 11.5,
Al_2O_3	> 14 - 20,
MgO	> 3 - 6,
CaO	> 4.5 - 10,
SrO	0 - < 4,
BaO	> 2.5 - 6,
with SrO + BaO	> 3,
ZnO	0 - 0.5,
ZrO ₂	≤0.5, and

az

31. (Amended) An aluminosilicate glass according to claim 2, containing up to 3% by weight SrO based on oxide.

36. (Amended) An alkali-free aluminoborosilicate glass containing less than 1500 ppm alkali metal oxides and consisting essentially of by weight % based on oxide,

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SiO ₂	
B_2O_3	
Al_2O_3	
MgO	
CaO	
SrO	
BaO	
with SrO + BaO	1
ZnO	I
1	

and essentially no alkali oxides.

37. (Amended) An alkali-free aluminoborosilicate glass containing less than 1500 ppm alkali metal oxides and consisting essentially of by weight % based on oxide,

SiO ₂
B_2O_3
Al_2O_3
MgO
CaO
SrO
BaO
with SrO + BaO
ZnO

Please enter the following new claims:

--38. An alkali-free aluminphorosilicate glass consisting of by weight % based on

oxide,

 SiO_2 B_2O_3 Al_2O_3 MgO CaO SrO BaO with SrO + BaO ZnO

> 58 - 65, > 6 - 11.5, > 14 - 20, > 3 - 6, > 4.5 - 10, 0 - 1.5, > 1.5 - 6, > 3, and 0 - < 2,

and essentially no alkali oxides

39. An alkali-free aluminoborosilicate glass consisting of by weight % based on oxide,

$$SiO_2$$
 B_2O_3
 Al_2O_3
 MgO
 CaO
 SrO
 BaO
 $with SrO + BaO$
 ZnO

and essentially no alkali oxides.

40. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

$$SiO_2$$
 B_2O_3
 Al_2O_3
 MgO
 CaO
 SrO
 BaO
 $with SrO + BaO$

> 3,

ZnO	0 - < 2,
ZrO_2	0-2,
TiO ₂	0-2,
With $ZrO_2 + TiO_2$	0-2,
As_2O_3	0 - 1.5,
Sb ₂ O ₃	0 - 1.5,
SnO ₂	0 - 1.5,
CeO ₂	0 - 1.5,
Cl ⁻	0 - 1.5,
F- \	0 - 1.5,
SO_4^{2-}	0 - 1.5, and
Wherein $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^2$	
$+ F^{-} + SO_4^{2-}$	0 - 1.5,

as Cont

and essentially no alkali oxides.

41. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

and essentially no alkali oxides.

42. An alkali-free aluminoborosilicate glass consisting essentially of by weight % based on oxide,

$$\begin{array}{c|c} SiO_2 & > 58-65, \\ B_2O_3 & > 6-11.5, \\ Al_2O_3 & > 14-20, \\ MgO & > 3-6, \\ SrO & > 4.5-10, \\ 0-<4, \\ BaO & > 2.5-6, \\ with SrO+BaO & > 3, \end{array}$$

	ZnO	0 - 0.5,
	ZrO_2	0 - 2,
	TiO ₂	0-2,
	with $ZrO_2 + TiO_2$	0 - 2,
	As_2O_3	0 - 1.5,
	Sb_2O_3	0 - 1.5,
	SnO_2	0 - 1.5,
	CeO ₂	0 - 1.5,
	Cl ⁻	0 - 1.5,
	F ⁻	0 - 1.5,
	SO ₄ ² -	0 - 1.5, and
O	Wherein $As_2O_3 + Sb_2O_3 + SnO_2 + CeO_2 + Cl^2$	
(15	$+ F^{-} + SO_4^{2-}$	0 - 1.5,
and essentia	ılly no alkali oxides.	

An alkali-free aluminoborosilicate glass consisting essentially of by weight % 43. based on oxide,

SiO ₂	> 58 - 65,
B_2O_3	> 6 - 11.5,
Al_2O_3	> 14 - 20,
MgO	> 3 - 6,
CaO	> 4.5 - 10,
SrO	0 - < 4,
BaO	> 2.5 - 6,
with SrO + BaO	> 3,
ZnO	0 - 0.5,
ZrO_2	≤0.5, and
TiO ₂	≤0.5 .

and essentially no alkali oxides.

An alkali-free aluminoborosilicate glass consisting of less than 1500 ppm 44. alkali metal oxides and consisting of by weight % based on oxide,

> 58 - 65,
> 6 - 11.5,
> 14 - 20,
> 3 - 6,
> 4.5 - 10,
0 - 1.5,
> 1.5 - 6,
> 3, and

45. An alkali-free aluminoborosilicate glass consisting of less than 1500 ppm alkali metal oxides and consisting of by weight % based on oxide,

B	
Cont	

SiO ₂
B_2O_3
Al_2O_3
MgO \
CaO \
SrO \
BaO \
with SrO + BaC
ZnO

> 58 - 65, > 6 - 11.5,
> 14 - 20,
> 3 - 6,
>4.5-10,
0 - < 4,
> 2.5 - 6,
> 3, and
0 - 0.5,

- 46. An aluminoborosilicate glass according to claim 40 containing Sb₂O₃.
- 47. An aluminoborosilicate glass according to claim 42 containing Sb₂O₃.
- 48. An aluminoborosilicate glass according to claim 1 that has a density of less than 2.6 g/cm³. --